

### **Remarks**

Claims 1, 6 - 11, 15 - 17, and 21 - 23 are pending in this application. Claims 1, 6, 8-10, 11, 15-17, and 23 are allowed. Claims 7 and 22 are being amended to clarify the claimed invention and to place the claims in condition for allowance. No new matter has been introduced by virtue of the present amendment. Applicants respectfully request reconsideration of the above application in view of the present amendment and the following remarks. Please note that all the percentages are called out as weight percentages in the following remarks, unless otherwise stated.

**Rejection of claim 21 under  
35 U.S.C. § 103(a) as being unpatentable  
over Stokes in view of Wirgovits**

Claim 21 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Stokes* (U.S. Patent No. 3,858,319) in view of *Wirgovits* (U.S. Patent No. 941,835). According to the Examiner, *Stokes* discloses a method for applying solder filler to an aluminum body part, heating the flux agent to deoxidize the surface of the aluminum body, and heating the solder filler to bond the solder filler to an aluminum body. (¶3). The Examiner states that *Wirgovits* discloses a tin- based solder filler consisting of, by weight, of 55% to 85% Sn, 12% to 40% Zn, and 3% to 5% Cu so that the solder sticks and the parts united become practically as one solid homogeneous mass. (¶ 3). According to the Examiner, it would have been obvious to one of ordinary skill in the art at the time Applicants' invention was made to provide the above tin-based solder as taught by *Wirgovits* in *Stokes et al.* in order to make a solid homogeneous mass.

*Stokes* in view of *Wirgovitz* does not teach, disclose or suggest claim 21 of the present invention. *Wirgovitz* discloses an alloy composed of over 60% tin, less than 30% zinc, and a small percent of copper. (Lines 72 through 75). Although a range that correlates to the "small percent of copper" is not defined, the sole alloy example disclosed in *Wirgovitz* is composed of 76.116% tin, 2.096% copper, and 21.788% zinc. (Lines 31 to 32). Indeed, *Wirgovitz* does not teach, disclose or suggest the solder filler comprised of 55% to 85% tin,

12% to 40% zinc, and 3% to 5% copper. Contrarily, the only alloy example disclosed in *Wirgovitz* includes 2.096% copper, not 3% - 5% copper. Moreover, the Examiner admits that *Stokes* failed to disclose applying a tin-based solder filler consisting of, by weight, 55% to 85% tin, 12% to 40% zinc, and 3% to 5% copper. For at least this reason, claim 21 is not unpatentable as being obvious over *Stokes* in view of *Wirgovitz*.

**Rejection of Claims 7 and 22  
under 35 U.S.C. § 103(a) as being  
unpatentable over *Stokes* in view  
of *Randall***

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Claims 7 and 22 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Stokes* in view of *Randall*. (U.S. Patent No. 1,417,348). According to the Examiner, *Randall* discloses a zinc based solder filler consisting of, by weight, of 78% to 89% zinc and 11% to 22% aluminum for the purposes of creating strength and hardness. The Examiner states that it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to use the above zinc based solder filler as taught by *Randall* in light of *Stokes* in order to produce a solder filler of great strength and hardness.

*Stokes* in view of *Randall* does not teach, disclose, or suggest supplying a zinc based solder filler consisted of, by weight, of 78% to 79.5% zinc and 20.5% to 22% aluminum, as recited in claim 22. Further, *Stokes* in view of *Randall* does not teach, disclose, or suggest applying a tin-based solder filler consisting of, by weight, 79.5% zinc and 20.5% aluminum, as recited in claim 7, depending from claim 2. The Examiner admits that *Stokes* fails to disclose a zinc based solder filler of 78% to 89% zinc and 11% to 22% aluminum. Moreover, *Randall* discloses a zinc based solder filler consisting of, by weight, 80% to 87% zinc and 13% to 20% aluminum. Therefore, the claimed range of 78% to 79.5% zinc and 28.5% to 22% aluminum is not taught, disclosed, or suggested by the combination of *Stokes* and *Randall*. For at least this reason, Applicants contend that claims 7 and 22 are patentable in light of the teachings of *Stokes* and *Randall*.

### Conclusion

For the foregoing reasons, Applicants believe that the Office Action of June 24, 2003 has been fully responded to. The present amendment was not earlier presented because the amendment and argument submitted with the prior amendment addressed all stated grounds for rejection in the prior Office Action. The present amendment and remarks are directed at further illustrating the claimed methods of applying a solder filler to an aluminum body part. The Examiner has already conducted a search on the solder filler application to aluminum body part concept since this language was recited in the original claims. Therefore, the present amendments do not raise any new issues for search or consideration and do not require any further searching by the Examiner. As such, in view of the above amendment and remarks, Applicants respectfully submit that the application is in condition for allowance, which allowance is respectfully requested. If the Examiner believes that a telephone conference will advance prosecution of this application, the Examiner is highly encouraged to telephone Applicant's attorney at the number given below.

Respectfully submitted,

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